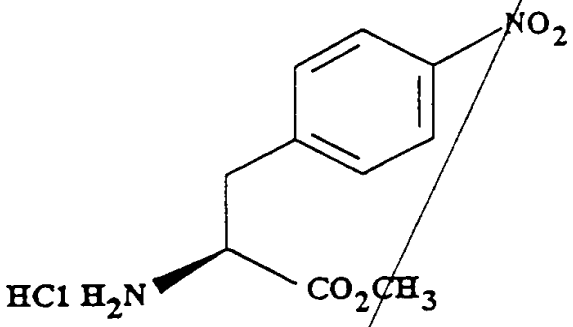
CLAIMS

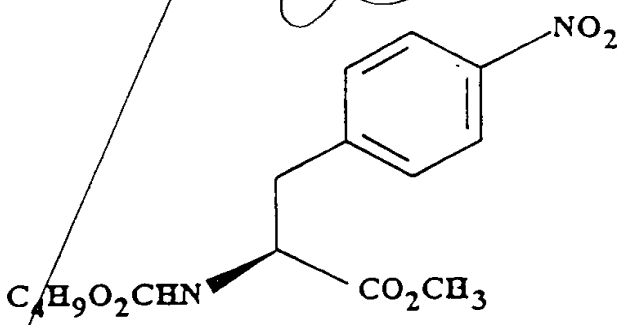
1. A process for the preparation of a (S)-4-{[3-[2(dimethylamino)ethyl]-1H-indol-5-yl]methyl}-2-oxazolidinone which process comprises the steps of

a) forming a carbamate from methyl 4-nitro-(L)-phenylalaninate hydrochloride, represented by formula (II)



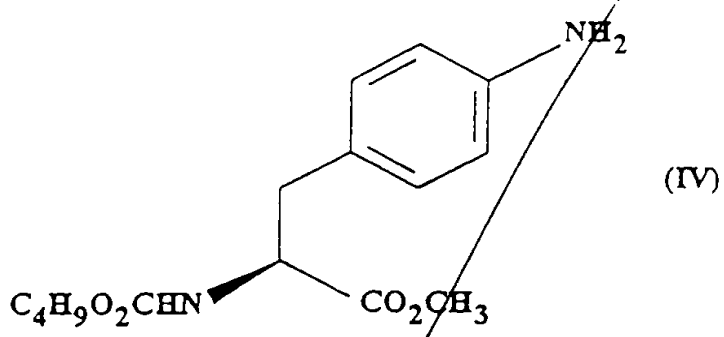
(II)

by adding sodium carbonate or sodium hydrogen carbonate and n-butyl chloroformate and reacting to give methyl(S)-N-butoxycarbonyl-4-nitrophenylalaninate, represented by formula (III)



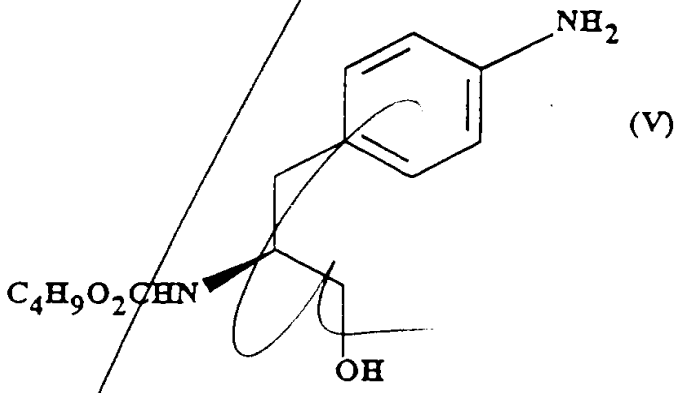
(III)

b) reducing the compound of formula (III) to give methyl (S)-N-butoxycarbonyl-4-amino phenylalaninate, represented by formula (IV)



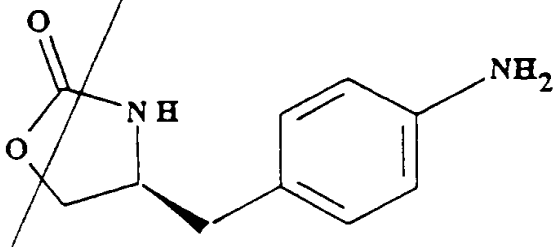
(IV)

c) reducing the methyl ester grouping $-CO_2CH_3$ in the compound of formula (IV) to give (S)-N-butoxycarbonyl-4-aminophenylalaninol, represented by formula (V)



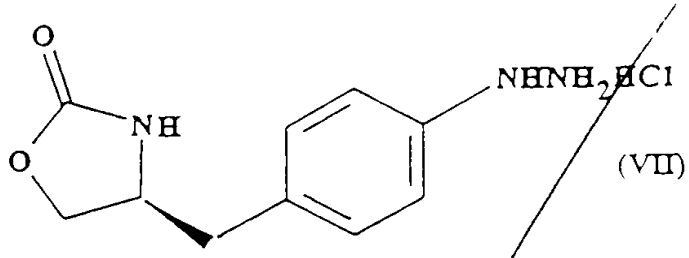
(V)

d) a ring closure of the compound of formula (V) to give (S)-4-(4-aminobenzyl)-2-oxazolidinone, represented by formula (VI)



(VI)

e) preparation of the diazonium salt of the compound of formula (VI) followed by reduction to give the hydrazine (S)-4-(4-hydrazinobenzyl)-2-oxazolidinone hydrochloride, represented by formula (VII)



(VII)

f) Fischer reaction of the compound of formula (VII) to give the compound of formula (I)

2. A process according to Claim 1 wherein one or more of steps (a) to (f) are carried out using a one pot procedure.

3. A process according to Claim 1 or 2 wherein steps a) to d) are carried out by a one pot procedure followed by isolation of the compound of formula (VI) and then a second one pot procedure for steps e) and f).

4. A process according to any one of Claims 1 to 3 wherein step a) is carried out in the presence of an aqueous ethyl acetate solvent, using sodium carbonate.

5. A process according to Claim 4 wherein the addition of sodium carbonate in step (a) takes place at a temperature of approximately 20°C and the addition of N-butyl chloroformate takes place at a temperature of approximately 30°C.

6. A process according to any one of Claims 1 to 5 wherein step b) is carried out by hydrogenation.

7. A process according to any one of Claims 1 to 6 wherein the step (c) reduction is effected using sodium borohydride.

8. A process according to any one of Claims 1 to 7 wherein step d) is carried out on a dry butanol solution of the compound of formula (V).

9. A process according to any one of Claims 1 to 8 wherein the ring closure is carried out using a 30% solution of sodium methoxide in methanol at a temperature which is in the range 50-120°C.

10. A process according to any one of Claims 1 to 9 wherein step (e) is carried out by

(i) reacting the compound of formula (VI) with sodium nitrite, and

(ii) reducing the diazonium salt formed in (i) using sodium sulphite.

11. A process according to any one of Claims 1 to 10 wherein the Fischer reaction of step (f) is carried out at a relatively high dilution.

12. A process for the purification of (S)-4-{[3-(dimethylamino)ethyl]-1H-indol-5-yl]-methyl}-2-oxazolidinone which process comprises the steps of

a) dissolving crude (S)-4-{[3-)dimethylamino)ethyl]-1H-indol-5-yl]-methyl}-2-oxazolidinone in a refluxing mixture of ethanol in ethyl acetate and filtering the hot solution;

b) slowly cooling the filtered solution to a temperature of about 5°C

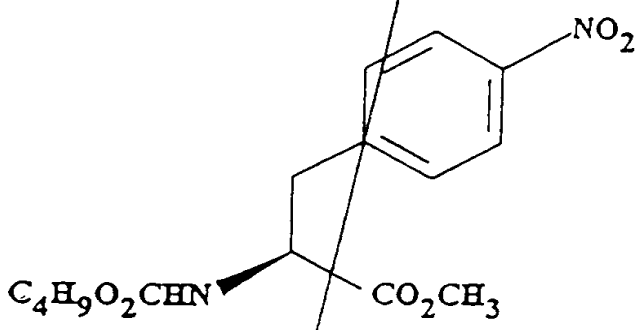
c) centrifuging the product from step b), washing with ethyl

acetate then drying; and

d) treating with acetone to remove solvated ethyl acetate.

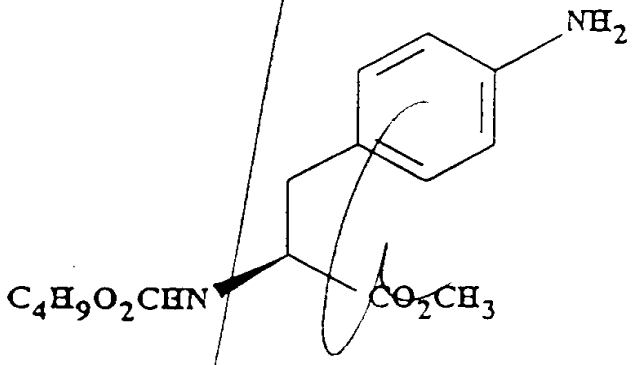
13. Non-solvated, pure (S)-4-{[3-(dimethylamino ethyl)-1H-indol-5-yl]-methyl}-2-oxazolidinone.

14. An intermediate of formula (III)



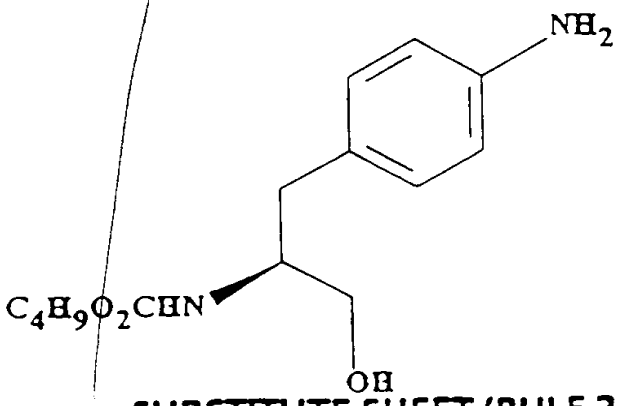
(III)

15. An intermediate of formula (IV)



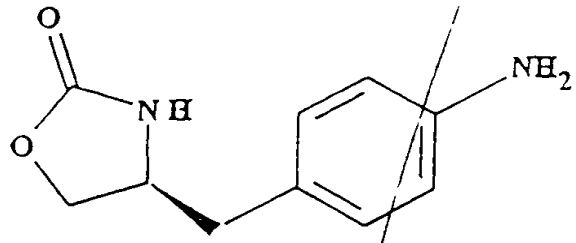
(IV)

16. An intermediate of formula (V)



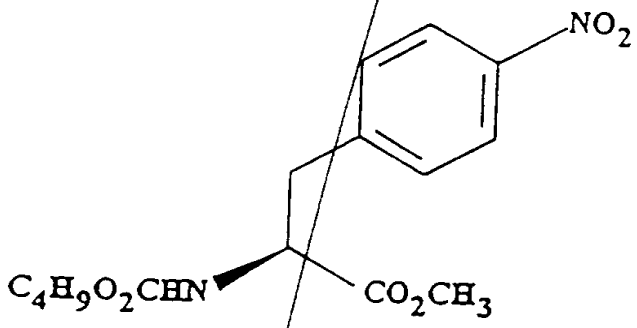
(V)

17. An intermediate of formula (VI)



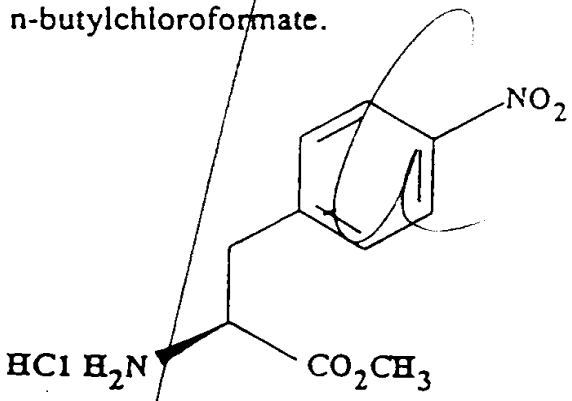
(VI)

18. A process for the preparation of a compound of formula (III)



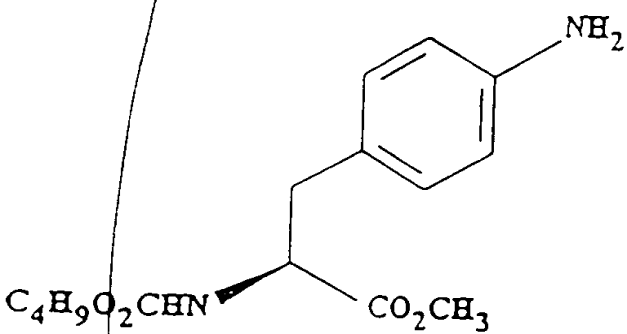
(III)

which process comprises reacting a compound of formula (II) with sodium carbonate and n-butylchloroformate.



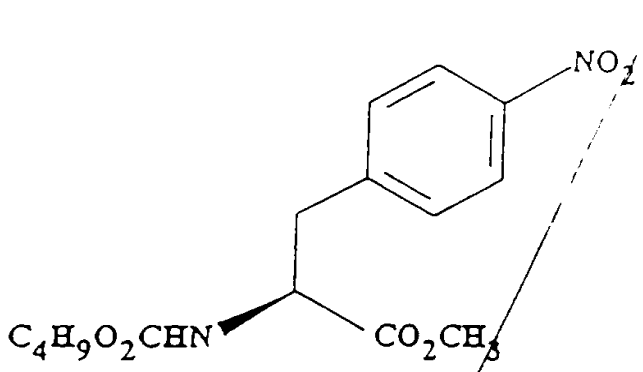
(II)

19. A process for the preparation of a compound of formula (IV)



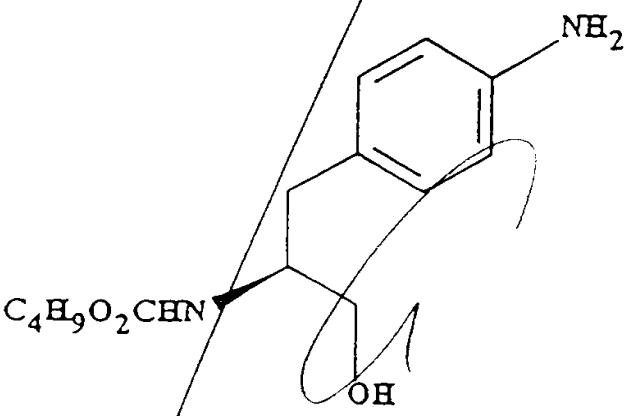
(IV)

which process comprises reducing a compound of formula (III)



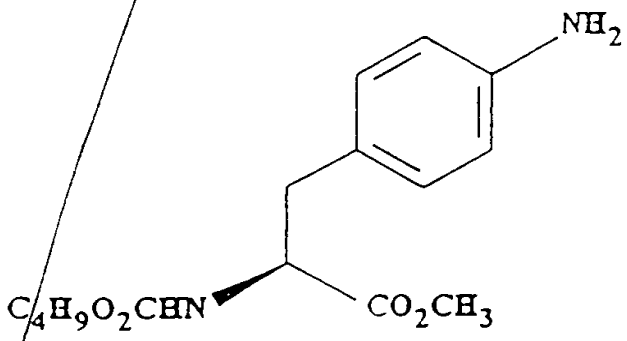
(III)

20. A process for the preparation of a compound of formula (V)



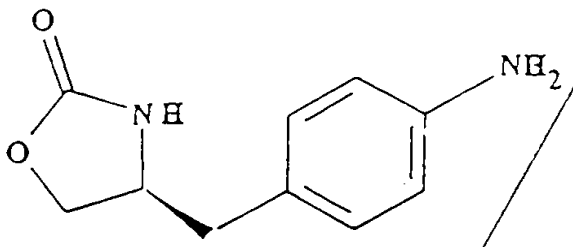
(V)

which process comprises reduction of a compound of formula (IV)



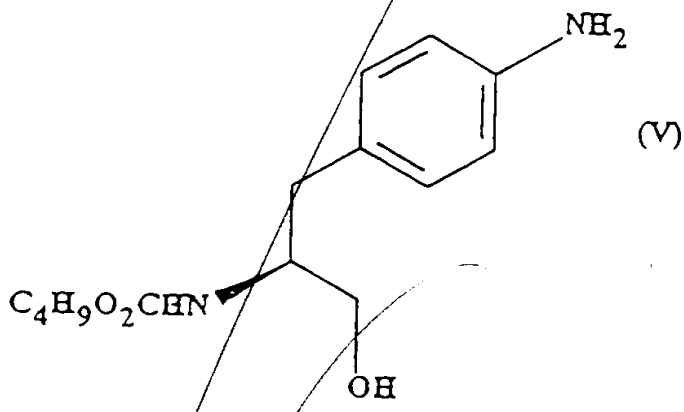
(IV)

21. A process for the preparation of a compound of formula (VI)



(VI)

which process comprises a ring closure of a compound of formula (V)



(V)

22. Use of an intermediate as claimed in Claim 14 in the manufacture of a composition for use in medicine.

23. Use of an intermediate as claimed in Claim 15 in the manufacture of a composition for use in medicine.

24. Use of an intermediate as claimed in Claim 16 in the manufacture of a composition for use in medicine.

25. Use of an intermediate as claimed in Claim 17 in the manufacture of a composition for use in medicine.

26. Use as claimed in any one of Claims 22 to 25 wherein the composition is for use in the treatment and prophylaxis of migraine.